General Mills, Inc.
General Offices

Post Office Box 1113
Minneapolis, Minnesota 55440

Engineering Pol

September 1, 1983

Minnesota Pollution Control Agency
1935 W. Co. Rd B-2
Roseville, MN 55413

Attention: Edward Meyer, Project Coordinator
Div. Of Solid and Hazardous Waste

Dear Mr. Meyer:

This is in reply to a letter of August 2, 1983, from Michael B. Ayers, concerning a remedial action and monitoring program for the solvent disposal site on the Henkel Corp. property at 2010 East Hennepin Ave. in Minneapolis.

In response to recommendations in Mr. Ayers letter, we asked Allan Gebhard of Barr Engineering Co. to give us a evaluation and steps he would recommend to follow positions taken in Mr. Ayers letter. Mr. Gebhard therefore outlined his recommendations in a letter to me dated August 25, 1983, a copy of which is enclosed. Barr Engineering Co. has been authorized to proceed with the steps outlined in Mr. Gebhard's letter of August 25, 1983. These steps do not include a St. Peter sandstone monitoring well. Based on monitoring data obtained, we do not have any reason to believe that the St. Peter formation has been affected by any solvent contamination of shallow groundwater on the Henkel site. Furthermore we are concerned that drilling of a St. Peter well in the vicinity of the disposal site will introduce solvent contamination into the St. Peter sandstone even with careful construction of the well. If additional potable water for a recharge flushing system as proposed by O & H Materials is needed and economical, consideration may be given to construction of a St. Peter well for this purpose.

O & H Materials has proposed, as preliminary to an "aggressive" shallow groundwater pump-out system design, to obtain soil samples from three representative borings at the solvent disposal site, and to construct a pilot soil column. This column would be to test the effectiveness of the soil flushing proposal. Soil would be analyzed before and after the flushing test. Also the volume of water would be determined which will be required to reduce the solvent concentration in the flushing water recovered to the concentration equivalent to that in the existing soil outside of the site area to be flushed. This concentration from test results thus far is about 1500 ppb. Before an actual remedial action proposal by O & H Materials can be accepted, an objective solvent concentration in the soil or shallow groundwater must be agreed upon to determine an end point for the potable water flushing phase of the remedial action. The perimeter recovery wells in the shallow groundwater would continue to be operated as outlined in the letter by Allan Gebhard; however, an endpoint for this phase must also be eventually agreed upon.

As previously requested of Mr. Ayers, we still need to know the efficiency required of an air stripping column for the shallow groundwater pumped out, or the concentration of solvents permitted in the air exhaust from the column. We would propose to discharge the shallow groundwater after air stripping and the Plattville-Carimona well pump out water to the storm sewer on Tallmadge Ave., and will still need to know from the MPCA what solvent concentration will be permitted at the storm sewer outlet to the Mississippi River. As a basis for defining reasonable limitations for discharge into the storm sewer as discussed with Mr. Michael Ayers, on August 2, 1983, Allan Gebhard has suggested that a pilot investigation at Plattville Well #8 be carried out and we have authorized Barr Engineering Co. to proceed with this as outlined in the letter of August 25, 1983. This information is essential to complete our remedial action proposal and to proceed with final design of the system. At this time we envision discharging water to the storm sewer at a concentration of about 1500 ppb initially. This concentration would no doubt be reduced in time and also be reduced by dilution and aeration in the storm sewer before discharge to the river.

We would like to arrange a meeting with you to discuss the above proposal. Please call me at (612) 540-3853, after you have had a chance to review it.

Sincerely yours,

Donald J. Thimsen, P.E.
Mgr. Environ. Engrg.

DJT:mb